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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------|------------------------|
| 10/523,994  | 02/09/2005  | Kazunori Tanaka      | 49677-165                 | 2851                   |
| 20277 7590 01/08/2008<br>MCDERMOTT WILL & EMERY LLP<br>600 13TH STREET, N.W.<br>WASHINGTON, DC 20005-3096 |             |                      | EXAMINER<br>TRAN, HOANG Q |                        |
|   |             |                      | ART UNIT<br>2874          | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>01/08/2008   | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/523,994

Applicant(s)

TANAKA ET AL.

Examiner

Hoang Tran

L.T.

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-8 and 14 is/are rejected.
- 7) ☒ Claim(s) 5 and 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

In view of the Appeal Brief filed on 09/18/2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



Rodney Bovernick

AU 2874

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US Patent Application to Kim (2004/0109650) in view of the US Patent Application Publication to Ono (2003/0158309).

Kim teaches a buffered cable having a primary [0014] and second coating layer [0016] on an outer peripheral surface of a glass fiber (Fig 1), Kim does not teach wherein a second resin composition constituting the second coating layer comprises a base polymer and 100 to 250 parts of metal hydroxide and 10 to 100 weight parts of a nitrogen base flame retardant material per 100 weight parts of the base polymer, and wherein the second resin composition does not contain halogenated materials further wherein polymer is constituted of a non-crystalline resin and wherein the base polymer comprises a mixture of polystyrene and polyphenylene base polymer. Ono does teach resin base polymer with flame retardant properties (Abstract), wherein a resin composition constituting the second coating layer comprises a base polymer and 100 to 250 parts of metal hydroxide [0079 and [0018] and 10 to 100 weight parts of a nitrogen base flame retardant material per 100 weight parts of the base polymer ([0019] and [022]), and wherein the second resin composition does not contain halogenated

materials ([00135]) further wherein polymer is constituted of a non-crystalline resin ([0153] and [0066]) and wherein the base polymer comprises a mixture of polystyrene [0066]) and polyphenylene base polymer ([0153]). **A motivation** for such an application would be to produce a halogen free polycarbonate resin composition having excellent transparency and dripping preventing properties (Ono's [Abstract]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Ono to the fiber cable of Kim with its flame retardant properties.

As for claims 6-8, Kim teaches the cable of claim 1; the specified limitations of transmission loss, residual thermal distortion and linear expansion coefficient are all functional properties of the claimed cable of Claim 1. While the features of an apparatus maybe recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone (See MPEP 2114) In re Swinehart, 169 USPQ 226 (CCPA 1971); In re Schreiber 44 USPQ2d 1429 (Fed. Cir. 1997).

As for Claims 14, Kim in view of Ono teaches the cable of Claim 1, wherein the Kim teaches the buffer does not contain Phosphorous. The entire disclosure of Kim does not indicate a buffer layer material of Phosphorous was used.

**Claims 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of the US Patent Application Publication to Ono (2003/0158309).**

With respect to claim 4, Kim teaches the buffer cable of claim 1, as stated in the above rejection; Kim in combination with Ono teaches the buffer cable of claim 1. The examiner identifies claim 4 as a product by process claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Once the examiner provides a rationale which supports the conclusion that the claimed product appears to be the same or similar to that of the prior art (See rejection 2 and 3), although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). See MPEP 2113. However Ono does mention the use of acid as a form of catalyst deactivator in the process of forming the polymer [0042]. A motivation for using acid is described in Ono [0042] wherein the acid is mixed in order to act as a deactivator of the catalyst. Therefore it would have been obvious at the time of the invention to apply the teachings of Ono to the fiber of Kim in order to make a fiber with high flame retardant properties.

***Allowable Subject Matter***

Claims 5, 9-12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5 is allowable over the prior art because the prior art of Kim in view of Ono does not discuss an application wherein the second layer comprises of two or more sub-layers. Therefore claims 5, 9-12 contains allowable subject matter.

### ***Response to Arguments***

Applicant's arguments, see Appeal Brief, filed 09/18/2007 with respect to Claim 1 have been fully considered and are persuasive. The Final Rejection of 02/26/2007 has been withdrawn. However upon further review and consideration the examiner has found the prior art of Kim in view of Ono reads onto Claim 1. Therefore the examiner has established new grounds of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Tran whose telephone number is 571-272-5049. The examiner can normally be reached on 9:00AM - 5:00 PM.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Hoang Tran  
AU 2874  
December 26, 2007

/Sung Pak/  
Sung H. Pak  
Primary Examiner  
AU 2874